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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,225	02/19/2004	Dai-Ming Kuo		7419

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EXAMINER	
MCKANE, ELIZABETH L	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,225	KUO, DAI-MING	
	Examiner	Art Unit	
	Leigh McKane	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-4 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 19 February 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US 2004/0265197).

Lin teaches a rubbish container **2** including an ozone generator **1** mounted on the inside wall of top cover **3**.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshimatsu (JP 10-113381).

Yoshimatsu discloses a rubbish container **10** having an ozone generator **8** mounted therein. See Figure 3.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurihara (JP 10-109702).

Kurihara teaches a rubbish container **1** having an ozone generator **11** mounted on the inside surface of top cover **2**.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimatsu in view of Kobayashi et al. (JP 64-48701).

The generator **8** of Yoshimatsu is not formed on an inside wall of a top cover. However,

Kobayashi et al. evidences that it was known in the art to form an ozone generator **9** in this location. See Figure 1. As moving the location of the generator involves no invention and the location of the inside wall of the top cover is well-established in the art, it would have been obvious to put the generator of Yoshimatsu on the cover.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin or Yoshimatsu, both in view of Kurihara and Kobayashi et al. Lin does not teach a vent hole such that the ozone is generated from air entering the vent
and the generated ozone is vented into the container. While teaching an on/off switch **53**, Lin does not teach a timing control. Yoshimatsu fails to teach a vent hole or control means.

Kurihara discloses an ozone generator for a rubbish container wherein air enters ozone generator through vent **4** and the generated ozone enters directly into the container. It would have been obvious to provide a vent hole in both of Lin and Yoshimatsu since Kurihara evidences that the availability of fresh air promotes efficient generation of ozone.

Kobayashi et al. teaches a rubbish container **1** having an ozone generator **9** on an inside surface of lid **3**. Kobayashi et al. further discloses that controller **10** sets a timer and operates the ozone generator for a specified period of time upon each closing of the lid. As Kobayashi et al. discloses that the timing means enables efficient deodorization of the rubbish and eliminates wasteful generation of the gas, it would have been an obvious modification to the inventions of Lin and Yoshimatsu.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Yoshimatsu.

Lin discloses that the ozone generator generates ozone through corona discharge. See

paragraph [0028]. Lin does not specify the structure of the generator. Yoshimatsu, however, discloses a corona discharge ozone generator having a cathode discharge tip **4b** aligned with the air vent **4a** of the anode and which generates an ion wind through **8b**. It would have been obvious to use the ozone generator of Yoshimatsu in the apparatus of Lin, since Yoshimatsu discloses use of the generator in waste receptacles. Moreover, one would have found it obvious to duplicate the cathode tips and anode vents as it has been held to be obvious to duplicate parts for a multiplied effect – that is, to increase the production of ozone.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimatsu.

Yoshimatsu discloses a corona discharge ozone generator having a cathode discharge tip **4b** aligned with the air vent **4a** of the anode and which generates an ion wind through **8b**. It would have been obvious to duplicate the cathode tips and anode vents as it has been held to be obvious to duplicate parts for a multiplied effect – that is, to increase the production of ozone.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurihara in view Kobayashi et al.

Kurihara discloses an ozone generator for a rubbish container wherein air enters ozone generator through vent **4** and the generated ozone enters directly into the container. Kurihara does not disclose a timing control means.

Kobayashi et al. teaches a rubbish container **1** having an ozone generator **9** on an inside surface of lid **3**. Kobayashi et al. further discloses that controller **10** sets a timer and operates the ozone generator for a specified period of time upon each closing of the lid. As Kobayashi et al. discloses that the timing means enables efficient deodorization of the rubbish and eliminates

wasteful generation of the gas, it would have been an obvious modification to the invention of Kurihara.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurihara in view of Yoshimatsu.

Kurihara discloses that the ozone generator generates ozone through UV radiation. Yoshimatsu discloses a corona discharge ozone generator having a cathode discharge tip **4b** aligned with the air vent **4a** of the anode and which generates an ion wind through **8b**. It would have been obvious to use the ozone generator of Yoshimatsu in the apparatus of Lin, since Yoshimatsu discloses use of the generator in waste receptacles and it would have been obvious to substitute one known type of ozone generator for another where the results are not unexpected. Moreover, one would have found it obvious to duplicate the cathode tips and anode vents as it has been held to be obvious to duplicate parts for a multiplied effect – that is, to increase the production of ozone.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Thursday (5:30 am-2:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leigh McKane

Leigh McKane
Primary Examiner
Art Unit 1744

elm
23 January 2006